

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA



**FILED**

02-28-08

04:59 PM

Order Instituting Rulemaking to Implement the  
Commission's Procurement Incentive Framework  
and to Examine the Integration of Greenhouse  
Gas Emissions Standards into Procurement  
Policies.

Rulemaking 06-04-009  
(Filed April 13, 2006)

**OPENING COMMENTS OF THE COMMUNITY ENVIRONMENTAL  
COUNCIL ON PROPOSED INTERIM OPINION ON GREENHOUSE GAS  
REGULATORY STRATEGIES**

Tamlyn Hunt  
Energy Program Director / Attorney  
Community Environmental Council  
26 W. Anapamu, 2<sup>nd</sup> Floor  
Santa Barbara, CA  
(805) 963-0583, ext. 122

February 28, 2008

OPENING COMMENTS OF THE COMMUNITY ENVIRONMENTAL  
COUNCIL ON PROPOSED INTERIM OPINION ON GREENHOUSE GAS  
REGULATORY STRATEGIES

The Community Environmental Council (“Environmental Council”) respectfully submits these opening comments on the proposed Interim Opinion on Greenhouse Gas Regulatory Strategies (“PD”), dated February 8, 2008.

The Environmental Council is a member-supported environmental non-profit organization formed in Santa Barbara in 1970 and is the leading environmental organization in our region. In 2004, the Environmental Council shifted its primary focus to energy and transportation issues and we are spearheading a regional effort to wean our communities from fossil fuels, on a net basis, during the next two decades. We are almost unique in combining on the ground work on a number of energy and climate change-related issues with our work on state and federal policy issues. Our state policy work is directly informed by our experience with what has worked, or is likely to work, at the local level. More information on the Environmental Council and our energy programs may be found at [www.fossilfreeby33.org](http://www.fossilfreeby33.org).

A summary of our opening comments follows. The Environmental Council:

- generally supports the PD; we also support:
  - the proposed cap and trade system for the electricity sector
  - requiring all utilities, including publicly-owned utilities to enact vigorous energy efficiency programs and similar renewable energy standards, as the PD recommends to the Air Resources Board
- applauds the Public Utilities Commission and the Energy Commission (“Joint Commissions”) for re-affirming a commitment to going beyond the

20% by 2010 renewable portfolio standard. However, we urge the Joint Commissions to reaffirm their previous support for a 33% standard by 2020

- urge the Joint Commissions to recommend that the Air Resources Board examine a carbon tax for all energy sectors as a complement or alternative to cap and trade
- urges the Joint Commissions to re-visit, as soon as possible, the issue of whether the natural gas sector should also be included in a cap and trade system
- urges the Joint Commissions to include in the PD the CPUC's previous statements regarding assessing the lifecycle emissions of electricity generation technologies and various sources of natural gas
- urges the Joint Commissions to include, in their comments on legal issues, the likely economic benefits of greenhouse gas mitigation in California, along with the possible benefits in terms of reduced damage from climate change

## I. Discussion

### A. Leveling the playing field for POU, CCAs, ESPs and IOUs

The Environmental Council supports the PD's recommendation to the Air Resources Board (ARB) regarding mandating higher RPS levels on publicly-owned utilities. While many POU have self-imposed RPS goals similar to what the IOUs are subject to<sup>1</sup>, the types of technologies that qualify under some POU goals (such as large hydro for some jurisdictions) vary from state IOU mandates. Also, the lack of any outside enforcement of POU goals makes achievement of the self-imposed goals less likely.

Similarly, we appreciate the PD's evaluation "of creating a level playing field for all retail providers of electricity in California by extending the same requirements for energy efficiency programs and renewable energy delivery to IOUs, POU, ESPs, and CCAs."<sup>2</sup>

While we support maximum devolution of government authority as a general principle, there is in this case a strong argument to be made that the playing field should be more level and that state mandates on locally-governed agencies (POU and CCAs) are the lesser evil. Imposing the same RPS and EE requirements on POU, ESPs and CCAs will also eliminate the oft-heard argument from the IOUs that unfair requirements are placed on them *vis a vis* the POU.

---

<sup>1</sup> We note that some POU have set even higher goals, such as Los Angeles Department of Water and Power; we note also that SMUD has been an exemplar for years, not only to POU but also IOUs, in terms of renewable energy and energy efficiency programs

<sup>2</sup> P. 16.

## B. 33% by 2020 RPS

The Environmental Council applauds the PD's support for going beyond the 20% by 2010 RPS.<sup>3</sup> The PD states, however: "We leave open consideration of the appropriate statutory percentage requirements and deadlines, pending further analysis."<sup>4</sup> This is a strange statement considering the fact that the Joint Commissions are on record in numerous documents and decisions supporting the 33% by 2020 RPS goal. In a very recent (Feb., 2008) decision in the RPS proceeding, the CPUC stated: "[W]e agree 'with Aglet that pursuing a 33% target is a policy goal of the Commission and one that should be pursued by the IOUs at this time.'"<sup>5</sup> The Joint Commissions are also on record, of course, supporting the 33% RPS in the Energy Action Plan II. **We urge the Joint Commissions to reaffirm support for the 33% by 2020 RPS in the PD.**

### i. Natural gas sector cap and trade

The Environmental Council previously recommended that the natural gas sector (NG sector) be included in a cap and trade system (*see* the Environmental Council's opening and reply comments on NG sector point of regulation issues). The PD declined to include the NG sector in a cap and trade system, citing the lack of widely available sustainable alternatives to mined natural gas. The PD states: "Several parties acknowledge that biogas holds some potential, but submit that there are technological and environmental obstacles to be overcome before this resource can be commercialized." However, the PD seems to overlook the fact that the policies the Joint Commissions are putting in place are not designed for an unchanging present – they are designed to taken into account

---

<sup>3</sup> Pp. 29-30.

<sup>4</sup> Id.

<sup>5</sup> D.08-02-008, quoting D.07-12-052, p. 255

likely future developments and to *spur* developments in the right direction. As we noted in previous comments, there are numerous promising sources of biogas and seep gas in California that could help reduce mined NG demand in California.

While we disagree that widely available alternatives will not be available over the next two decades, we agree with the PD that the best options for reducing emissions in the NG sector will be beefed-up efficiency and conservation programs. If a programmatic approach for the NG sector, as recommended by the PD, results in substantial emissions reductions without a cap and trade, we support such an approach for the nonce. However, under such an approach it is imperative that the CPUC set additional ambitious NG sector savings goals – and vigorously enforce such goals through application of penalties where warranted.

There has been much controversy over the last few months regarding the CPUC's new "risk/reward" incentive structure for electricity and NG savings, particularly when the CPUC recently modified the program to allow rewards (profits) to accrue if the IOUs achieve only 65% of the savings goals. For the NG sector to achieve the deep cuts in emissions necessary under AB 32, we anticipate that the IOUs will have to achieve far more than 65% of the savings goals.

Alternatively, the CPUC will have to set higher goals. As the process continues in R.06-04-010 (the energy efficiency proceeding) for setting goals beyond the 2009-2011 portfolios, through 2020, we strongly recommend that the Joint Commissions fully consider the impacts skyrocketing fossil fuel prices are having on the cost-effectiveness of energy efficiency, through enacting robust energy efficiency savings goals for the electricity and NG sectors for later years.

Accordingly, we urge the Joint Commissions to reconsider inclusion of the NG sector in a cap and trade system at a specified later date – perhaps by 2010.

### **C. The Commission should recommend that ARB consider a carbon tax**

The PD, at page 26, states that the Joint Commissions did not “seriously consider the carbon tax option” because “it would most likely be imposed on the economy as a whole by ARB.” The Environmental Council recommended, in comments on the MAC Report last year, as well as in comments on the point of regulation in the NG sector, that the Joint Commissions fully consider a carbon tax as a substitute or a complement to the proposed cap and trade system.

We note that the PD makes a number of recommendations to ARB that require ARB to take action requiring additional legislation (because such authority is outside of the Joint Commissions’ and ARB’s purview) – such as imposing energy efficiency requirements on POUs, uniform renewable energy requirements on POUs and IOUs, or seeking additional authority to auction emissions allowances. Accordingly, **the argument offered at page 26 regarding why the Joint Commissions did not seriously consider the carbon tax option does not appear to have merit.** As we discussed in previous comments to the Joint Commissions, we urge the Joint Commissions to fully consider the carbon tax option as a possibly superior – or at least complementary – policy tool for reducing greenhouse gas emissions in the electricity and NG sectors.

### **D. Lifecycle emission analysis needs to be discussed**

The CPUC considered the Environmental Council’s comments regarding lifecycle emissions for power generation technologies earlier in this proceeding.

In the Assigned Commissioner's Ruling and Phase II Scoping Memo from February 2, 2007, the CPUC stated:

In its PHC statement, Community Environmental Council recommended that the CPUC apply a lifecycle analysis to identify emissions related to liquefied natural gas storage facilities. Community Environmental Council argues that lifecycle analysis provides a more complete picture of emissions associated with energy consumption. However, such an analysis is considerably more complicated than traditional output-based emissions analysis. I understand from CPUC staff that researchers have yet to agree upon a methodology for performing lifecycle analyses of GHG emissions for some fuel sources, in particular, nuclear and liquefied natural gas. If this proceeding were to undertake a lifecycle analysis for liquefied natural gas facilities, to be consistent a lifecycle analysis would be necessary for all methods used to produce electricity. This would require well-established, peer-reviewed analyses and/or submission by the parties of alternative analyses for review in this proceeding. Because the methodology for lifecycle analysis of GHG emissions is still being developed, and widely accepted studies have not been completed, I do not include lifecycle analysis of GHG emissions in the scope of Phase 2. Because CARB has indicated a desire to conduct this type of analysis for its AB 32 regulations and those regulations are not required to be adopted until after the end of the timetable for this proceeding, it is possible that the CPUC may want to consider analysis of lifecycle emissions during a later proceeding.<sup>6</sup>

The Environmental Council also submitted a detailed analysis of this issue in opening comments on NG sector point of regulation issues (Dec. 17, 2007). The Joint Commissions failed to address these comments in any way in the PD.

With the issue of lifecycle analysis of emissions, in both the transportation sector<sup>7</sup> and the utility sector, becoming more prominent (numerous studies have been

---

<sup>6</sup> Pp. 13-14.

<sup>7</sup> The biofuels debate, in particular, has heated up recently due to new studies examining the indirect impacts of biofuels production in the US in terms of increased crop cultivation and land use impacts in other countries allegedly resulting from decline of corn and other grain exports from the US.



released over the last two years on this issue), it would behoove the Joint Commissions to re-consider the proper timing of a lifecycle emissions analysis for the utility sector. We urge the Joint Commissions to establish a timetable for such an analysis in a new phase of this proceeding or establish a new proceeding to examine these issues.

The Energy Commission is, in fact, on record supporting just such an analysis in its last inventory of state-wide greenhouse gas emissions: **“Because GHGs affect the entire planet, not just the location where they are emitted, policies developed to address climate change should include an evaluation of emissions from the entire fuel cycle whenever possible.”**<sup>8</sup>

It is troubling that the Joint Commissions, and not just the CPUC, continue to decline to address this possible crucial issue. At the least, the PD should mention the previous discussion had in this proceeding on this issue and indicate the Joint Commissions’ latest thinking on this issue.

#### **E. Legal issues**

We are pleased that the Joint Commissions agreed with our analysis that the deliverer/first seller approach should not be found to be preempted by the dormant Commerce Clause. However, as mentioned in previous comments, **we recommend that the PD also list the likely economic benefits of reducing greenhouse gas emissions in California** (*see* our Comments on the MAC Report, August 6, 2007). By listing such benefits, as well as the benefits from mitigating climate change concerns (which admittedly will be very long-term and won’t happen unless the rest of the U.S. and other nations also dramatically reduce

---

<sup>8</sup> CEC, statewide greenhouse gas inventory, p. iii. Dec., 2006.

GHGs), the proposed cap and trade system will be more likely to withstand any legal challenge brought against it pursuant to the Commerce Clause and the *Pike* balancing test.

#### **F. Miscellaneous comments and errata**

The PD lists a number of entities supportive of the deliverer/first seller approach to cap and trade, at page 47. The Environmental Council should also be listed, as we submitted comments on at least three occasions in this proceeding supporting this approach to cap and trade (on August 6, 2007, in comments on the Market Advisory Committee report, and on December 17, 2007, in opening comments on natural gas sector point of regulation issues and later in reply comments).

The PD is missing a “the” in the second paragraph on page 87, after “many of” and “parties’” in the middle of the paragraph.

On page 90, “Leiberman” should be “Lieberman.”

Respectfully submitted,

TAM HUNT

A handwritten signature in black ink, consisting of stylized, overlapping loops and strokes, likely representing the name 'Tam Hunt'.

Energy Program Director /  
Attorney  
Community Environmental  
Council  
26 W. Anapamu, 2<sup>nd</sup> Floor  
Santa Barbara CA 93101  
(805) 963-0583, ext. 122

Dated: February 28, 2008

# CERTIFICATE OF SERVICE

I hereby certify that I have served by electronic service a copy of the foregoing OPENING COMMENTS OF THE COMMUNITY ENVIRONMENTAL COUNCIL ON INTERIM OPINION ON GREENHOUSE GAS REGULATORY STRATEGIES on all known interested parties of record in R.06-04-009 included on the service list appended to the original document filed with this Commission. Service by first class U.S. mail has also been provided to those who have not provided an email address.

Dated at Santa Barbara, California, February 28, 2008.



---

Tam Hunt

## *Appearance*

cadams@covantaenergy.com  
steven.schleimer@barclayscapital.com  
steven.huhman@morganstanley.com  
rick\_noger@praxair.com  
keith.mccrea@sablaw.com  
ajkatz@mwe.com  
ckrupka@mwe.com  
kyle\_boudreaux@fpl.com  
cswollums@midamerican.com  
Cynthia.A.Fonner@constellation.com  
kevin.boudreaux@calpine.com  
trdill@westernhubs.com  
ej\_wright@oxy.com  
pseby@mckennalong.com  
todil@mckennalong.com  
steve.koerner@elpaso.com  
jenine.schenk@apses.com  
jbw@slwplc.com  
kelly.barr@srpnet.com  
rrtaylor@srpnet.com  
smichel@westernresources.org  
roger.montgomery@swgas.com  
Lorraine.Paskett@ladwp.com  
ron.deaton@ladwp.com  
snewsom@semprautilities.com  
dhuard@manatt.com  
curtis.kebler@gs.com  
dehling@klng.com  
gregory.koiser@constellation.com  
npedersen@hanmor.com  
mmazur@3phasesRenewables.com  
vitaly.lee@aes.com  
tiffany.rau@bp.com  
klatt@energyattorney.com  
rhelgeson@scppa.org  
douglass@energyattorney.com  
pssed@adelphia.net  
bwallerstein@aqmd.gov  
akbar.jazayeri@sce.com  
annette.gilliam@sce.com  
cathy.karlstad@sce.com  
Laura.Genao@sce.com  
rkmoore@gswater.com  
dwood8@cox.net  
atrial@sempra.com  
apak@sempraglobal.com  
dhecht@sempratrading.com  
daking@sempra.com  
svongdeuane@semprasolutions.com  
troberts@sempra.com  
liddell@energyattorney.com  
marcie.milner@shell.com  
rwinthrop@pilotpowergroup.com  
tdarton@pilotpowergroup.com  
lschavrien@semprautilities.com  
GloriaB@anzaelectric.org  
llund@commerceenergy.com  
thunt@cecmail.org  
jeanne.sole@sfgov.org  
john.hughes@sce.com  
llorenz@semprautilities.com  
marcel@turn.org  
nsuetake@turn.org  
dil@cpuc.ca.gov  
fjs@cpuc.ca.gov  
achang@nrdc.org  
rsa@a-klaw.com  
ek@a-klaw.com  
kgrenfell@nrdc.org  
mpa@a-klaw.com  
sls@a-klaw.com  
bill.chen@constellation.com  
bkc7@pge.com  
epoole@adplaw.com  
agrimaldi@mckennalong.com  
bcragg@goodinmacbride.com  
jsqueri@gmssr.com  
jarmstrong@goodinmacbride.com  
kbowen@winston.com  
lcottle@winston.com

sbeatty@cwclaw.com  
vprabhakaran@goodinmacbride.com  
jkarp@winston.com  
jeffgray@dwt.com  
cjw5@pge.com  
ssmyers@att.net  
lars@resource-solutions.org  
alho@pge.com  
aweller@sel.com  
jchamberlin@strategicenergy.com  
beth@beth411.com  
kerry.hattevik@mirant.com  
kowalewskia@calpine.com  
wbooth@booth-law.com  
hoerner@redefiningprogress.org  
janill.richards@doj.ca.gov  
cchen@ucsusa.org  
gmorris@emf.net  
tomb@crossborderenergy.com  
kjinovation@earthlink.net  
bmcc@mccarthy law.com  
sberlin@mccarthy law.com  
Mike@alpinenaturalgas.com  
joyw@mid.org  
UHelman@caiso.com  
jjensen@kirkwood.com  
mary.lynch@constellation.com  
lrdevanna-rf@cleanenergysystems.com  
abb@eslawfirm.com  
mclaughlin@braunlegal.com  
glw@eslawfirm.com  
jluckhardt@downeybrand.com  
jdh@eslawfirm.com  
vwelch@environmentaldefense.org  
www@eslawfirm.com  
  
westgas@aol.com  
scohn@smud.org  
atrowbridge@daycartermurphy.com  
dansvec@hdo.net  
notice@psrec.coop  
deb@a-klaw.com  
cynthia.schultz@pacificcorp.com

kyle.l.davis@pacificcorp.com  
ryan.flynn@pacificcorp.com  
carter@ieta.org  
jason.dubchak@niskags.com  
bjones@mjbradley.com  
  
kcolburn@symbioticstrategies.com  
rapcowart@aol.com  
Kathryn.Wig@nrgenergy.com  
sasteriadis@apx.com  
george.hopley@barcap.com  
ez@pointcarbon.com  
burtraw@rff.org  
vb@pointcarbon.com  
andrew.bradford@constellation.com  
gbarch@knowledgeinenergy.com  
ralph.dennis@constellation.com  
smindel@knowledgeinenergy.com  
brabe@umich.edu  
bpotts@foley.com  
james.keating@bp.com  
jimross@r-c-s-inc.com  
tcarlson@reliant.com  
ghinners@reliant.com  
zaiontj@bp.com  
julie.martin@bp.com  
fiji.george@elpaso.com  
echiang@elementmarkets.com  
fstern@summitblue.com  
nenbar@energy-insights.com  
nlenssen@energy-insights.com  
bbaker@summitblue.com  
william.tomlinson@elpaso.com  
kjsimonsen@ems-ca.com  
Sandra.ely@state.nm.us  
bmcquown@reliant.com  
dbrooks@nevp.com  
anita.hart@swgas.com  
randy.sable@swgas.com  
bill.schrand@swgas.com  
jj.prucnal@swgas.com  
sandra.carolina@swgas.com  
ckmitchell1@sbcglobal.net

chilen@sppc.com  
emello@sppc.com  
tdillard@sierrapacific.com  
dsoyars@sppc.com  
jgreco@caithnessenergy.com  
leilani.johnson@ladwp.com  
randy.howard@ladwp.com  
Robert.Rozanski@ladwp.com  
robert.pettinato@ladwp.com  
HYao@SempraUtilities.com  
rprince@semprautilities.com  
rkeen@manatt.com  
nwhang@manatt.com  
pjazayeri@stroock.com  
derek@climateregistry.org  
david@nemtzw.com  
harveyederpspc.org@hotmail.com  
sendo@ci.pasadena.ca.us  
slins@ci.glendale.ca.us  
THAMILTON5@CHARTER.NET  
bjeider@ci.burbank.ca.us  
rmorillo@ci.burbank.ca.us  
aimee.barnes@ecosecurities.com  
case.admin@sce.com  
tim.hemig@nrgenergy.com  
bjl@bry.com  
aldyn.hoekstra@paceglobal.com  
ygross@sempraglobal.com  
jlaun@apogee.net  
kmkiener@fox.net  
scottanders@sandiego.edu  
jkloberdanz@semprautilities.com  
andrew.mcallister@energycenter.org  
jack.burke@energycenter.org  
jennifer.porter@energycenter.org  
sephra.ninow@energycenter.org  
dniehaus@semprautilities.com  
jleslie@luce.com  
ofoote@hkcf-law.com  
ekgrubaugh@iid.com  
  
pepper@cleanpowermarkets.com  
gsmith@adamsbroadwell.com

mdjoseph@adamsbroadwell.com  
Diane\_Fellman@fpl.com  
hayley@turn.org  
mflorio@turn.org  
Dan.adler@calcef.org  
mhyams@sfwater.org  
tburke@sfwater.org  
norman.furuta@navy.mil  
amber@ethree.com  
annabelle.malins@fco.gov.uk  
dwang@nrdc.org  
filings@a-klaw.com  
nes@a-klaw.com  
obystrom@cera.com  
sdhilton@stoel.com  
scarter@nrdc.org  
abonds@thelen.com  
cbaskette@enernoc.com  
colin.petheram@att.com  
jwmctarnaghan@duanemorris.com  
kfox@wsgr.com  
kkhoja@thelenreid.com  
pvallen@thelen.com  
ray.welch@navigantconsulting.com  
spauker@wsgr.com  
rreinhard@mofo.com  
cem@newsdata.com  
hgolub@nixonpeabody.com  
jscancarelli@flk.com  
jwiedman@goodinmacbride.com  
mmattes@nossaman.com  
jen@cnt.org  
lisa\_weinzimer@platts.com  
steven@moss.net  
sellis@fypower.org  
arno@recurrentenergy.com  
BRBc@pge.com  
ELL5@pge.com  
gxl2@pge.com  
jxa2@pge.com  
JDF1@PGE.COM  
RHHJ@pge.com  
sscb@pge.com

svs6@pge.com  
S1L7@pge.com  
vjw3@pge.com  
karla.dailey@cityofpaloalto.org  
farrokh.albuyeh@oati.net  
dtibbs@aes4u.com  
jhahn@covantaenergy.com  
andy.vanhorn@vhcenergy.com  
Joe.paul@dynegy.com  
info@calseia.org  
gblue@enxco.com  
sbeserra@sbcglobal.net  
monica.schwebs@bingham.com  
phanschen@mofo.com  
josephhenri@hotmail.com  
pthompson@summitblue.com  
dietrichlaw2@earthlink.net  
Betty.Seto@kema.com  
JerryL@abag.ca.gov  
jody\_london\_consulting@earthlink.net  
steve@schiller.com  
mrw@mrwassoc.com  
rschmidt@bartlewells.com  
adamb@greenlining.org  
stevek@kromer.com  
clyde.murley@comcast.net  
brenda.lemay@horizonwind.com  
carla.peterman@gmail.com  
elvine@lbl.gov  
rhwiser@lbl.gov  
C\_Marnay@lbl.gov  
philm@scdenergy.com  
rita@ritanortonconsulting.com  
cpechman@powereconomics.com  
emahlon@ecoact.org  
richards@mid.org  
rogerv@mid.org  
tomk@mid.org  
fwmonier@tid.org  
brbarkovich@earthlink.net  
johnrredding@earthlink.net  
clark.bernier@rlw.com  
rmccann@umich.edu

cmkehrein@ems-ca.com  
e-recipient@caiso.com  
grosenblum@caiso.com  
  
mgillette@enernoc.com  
rsmutny-jones@caiso.com  
saeed.farrokhpay@ferc.gov  
david@branchcomb.com  
kenneth.swain@navigantconsulting.com  
kdusel@navigantconsulting.com  
gpickering@navigantconsulting.com  
lpark@navigantconsulting.com  
davidreynolds@ncpa.com  
scott.tomashefsky@ncpa.com  
ewolfe@resero.com  
Audra.Hartmann@Dynegy.com  
Bob.lucas@calobby.com  
curt.barry@iwpnews.com  
danskopec@gmail.com  
dseperas@calpine.com  
dave@ppallc.com  
dkk@eslawfirm.com  
wynne@braunlegal.com  
kgough@calpine.com  
kellie.smith@sen.ca.gov  
kdw@woodruff-expert-services.com  
mwaugh@arb.ca.gov  
pbarthol@energy.state.ca.us  
pstoner@lgc.org  
rachel@ceert.org  
bernardo@braunlegal.com  
steven@lipmanconsulting.com  
steven@iepa.com  
wtasat@arb.ca.gov  
etiedemann@kmtg.com  
ltenhope@energy.state.ca.us  
bushinskyj@pewclimate.org  
lmh@eslawfirm.com  
obartho@smud.org  
bbeebe@smud.org  
bpurewal@water.ca.gov  
dmacmull@water.ca.gov  
kmills@cfbf.com



karen@klindh.com  
ehadley@reupower.com  
Anne-Marie\_Madison@TransAlta.com  
sas@a-klaw.com  
egw@a-klaw.com  
akelly@climatetrust.org  
alan.comnes@nrgenergy.com  
kyle.silon@ecosecurities.com  
californiadockets@pacificorp.com  
Philip.H.Carver@state.or.us  
samuel.r.sadler@state.or.us  
lisa.c.schwartz@state.or.us  
cbreidenich@yahoo.com  
dws@r-c-s-inc.com  
jesus.arredondo@nrgenergy.com  
charlie.blair@delta-ee.com  
Tom.Elgie@powerex.com  
clarence.binninger@doj.ca.gov  
david.zonana@doj.ca.gov  
agc@cpuc.ca.gov  
aeg@cpuc.ca.gov  
blm@cpuc.ca.gov  
cf1@cpuc.ca.gov  
cft@cpuc.ca.gov  
tam@cpuc.ca.gov  
dsh@cpuc.ca.gov  
edm@cpuc.ca.gov  
eks@cpuc.ca.gov  
cpe@cpuc.ca.gov  
hym@cpuc.ca.gov  
hs1@cpuc.ca.gov  
jm3@cpuc.ca.gov  
jnm@cpuc.ca.gov  
jbf@cpuc.ca.gov  
jk1@cpuc.ca.gov  
jst@cpuc.ca.gov  
jtp@cpuc.ca.gov  
jol@cpuc.ca.gov  
jci@cpuc.ca.gov

jf2@cpuc.ca.gov  
krd@cpuc.ca.gov  
lrm@cpuc.ca.gov  
ltt@cpuc.ca.gov  
mjd@cpuc.ca.gov  
ner@cpuc.ca.gov  
pw1@cpuc.ca.gov  
psp@cpuc.ca.gov  
pzs@cpuc.ca.gov  
rmm@cpuc.ca.gov  
ram@cpuc.ca.gov  
smk@cpuc.ca.gov  
sgm@cpuc.ca.gov  
svn@cpuc.ca.gov  
scr@cpuc.ca.gov  
tcx@cpuc.ca.gov  
ken.alex@doj.ca.gov  
ken.alex@doj.ca.gov  
bdicapo@caiso.com  
jsanders@caiso.com  
jgill@caiso.com

ppettingill@caiso.com  
mscheibl@arb.ca.gov  
jdoll@arb.ca.gov  
pburmich@arb.ca.gov  
bblevins@energy.state.ca.us  
dmetz@energy.state.ca.us  
deborah.slone@doj.ca.gov  
dks@cpuc.ca.gov  
kgriffin@energy.state.ca.us  
ldecarlo@energy.state.ca.us  
mprior@energy.state.ca.us  
mgarcia@arb.ca.gov  
pduvair@energy.state.ca.us  
wsm@cpuc.ca.gov  
hurlock@water.ca.gov  
hcronin@water.ca.gov  
rmiller@energy.state.ca.us